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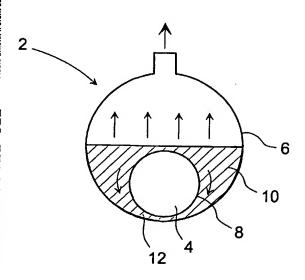
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(54) Title: SUBMERGED EVAPORATOR WITH INTEGRATED HEAT EXCHANGER



(57) Abstract: The invention provides a submerged evaporator (14) with integrated plate heat ex-changer (4) that may operate with markedly increased capacity, where the evaporator (14) does not require more space than other known types and have a smaller filling volume of refrigerant (10) than prior art units. The integrated plate heat exchanger (4) is built up with an outer contour that substantially follow the lower contour of the casing (6) and the liquid level, where the integrated heat exchanger (4) has at least one inlet connection (24.1) and at least one outlet connection (24.2) for secondary refrigerant (26), and where the upper volume of the casing acts as a liquid separator. With such design, much less space is occupied than with prior art types of submerged evaporators. The reason is that the internal volume is better utilised. Typically, there is a cylindric casing (6) with welded or screwed on ends (22), where internally there is mounted a plate heat exchanger (4) having a part cylindric shape and an external diameter which is between 5 and 15 mm less than the internal diameter of the casing (6). Hereby is achieved a submerged evaporator (14) with reduced filling of refrigerant (10).

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